AMENDMENTS TO THE CLAIMS

Please add new claims 14-20 and amend the claims as follows:

1. (Currently Amended) A method of manufacturing porous glass base material for optical fiber, comprising:

flame-hydrolyzing raw materials in an oxyhydrogen flame to generate glass fine particles;

~~using a burner to deposit~~ depositing the glass fine particles on a rotating target to form said porous glass base material by using a burner~~, said burner being moved relatively to said rotating target~~;

moving said burner relative to said rotating target such that there is a moving area, on a surface of the rotating target, where the glass fine particles are carried in flame to directly hit the rotating target; and

~~adjusting an amount of hydrogen and oxygen supplied to said burner;~~

cooling a surface of the porous glass base material, during said ~~using the burner to deposit the glass fine particles~~ depositing, while adjusting a temperature difference (Ta-Tb) between a surface temperature of said ~~porous glass base material when touching a flame of said burner~~ moving area (Ta) and a surface temperature of an area of said porous glass base material ~~prior to touching said flame of said burner~~ outside said moving area (Tb) to be within a range from 200 °C to 700 °C~~; and~~

~~dehydrating and sintering said porous glass base material to transform said porous glass base material into clear glass~~.

2. (Currently Amended) A porous glass base material for optical fiber made ~~of the porous glass base material obtained~~ according to the method of claim 1~~, wherein said porous glass base material is dehydrated, sintered, and transformed into clear glass~~.

3. (Currently Amended) The method of manufacturing porous glass base material for optical fiber according to claim 1, wherein said ~~rotating target~~ <u>moving area</u> is displaced ~~relative to~~ <u>as</u> said burner ~~being moved~~ <u>moves</u>.

4. (Currently Amended) The method of manufacturing porous glass base material for optical fiber according to claim 1, wherein said burner comprises a concentric multi tube burner.

5. (Currently Amended) The method of manufacturing porous glass base material for optical fiber according to claim 4, ~~wherein said concentric multi tube burner comprises~~ <u>further comprising</u>:

<u>supplying $SiCl_4$ and O_2 to</u> a first tube ~~supplied with $SiCl_4$ and O_2~~ <u>of said concentric multi tube burner during said depositing</u>;

<u>supplying air to</u> a second tube ~~supplied with air~~ <u>of said concentric multi tube burner during said depositing</u>;

<u>supplying H_2 to</u> a third tube ~~supplied with H_2~~ <u>of said concentric multi tube burner during said depositing</u>;

<u>supplying N_2 to</u> a fourth tube ~~supplied with N_2~~ <u>of said concentric multi tube burner during said depositing</u>; and

<u>supplying O_2 to</u> a fifth tube ~~supplied with O_2~~ <u>of said concentric multi tube burner during said depositing</u>.

6. (Previously Presented) The method of manufacturing porous glass base material for optical fiber according to claim 1, wherein said glass fine particles are deposited at a rate in a range of 2040 g/hr to 2360 g/hr.

7. (Previously Presented) The method of manufacturing porous glass base material for optical fiber according to claim 1, wherein the temperature difference (Ta-Tb) is within a range from 200 °C to 400°C.

8. (Withdrawn) The method of manufacturing porous glass base material for optical fiber according to claim 1, wherein the temperature difference (Ta-Tb) is within a range from 500 °C to 700 °C.

9. (Currently Amended) The method of manufacturing porous glass base material for optical fiber according to claim 1, wherein a deposition efficiency ~~was~~ <u>is</u> in a range of 0.51 to 0.59.

10. (Withdrawn) The method of manufacturing porous glass base material for optical fiber according to claim 1, wherein said glass fine particles are deposited at a rate in a range of 2040 g/hr to 2160 g/hr.

11. (Previously Presented) The method of manufacturing porous glass base material for optical fiber according to claim 1, wherein said glass fine particles are deposited at a rate in a range of 2200 g/hr to 2360 g/hr.

12. (Currently Amended – Withdrawn) The method of manufacturing porous glass base material for optical fiber according to claim 1, wherein a deposition efficiency ~~was~~ is in a range of 0.51 to 0.54.

13. (Currently Amended) The method of manufacturing porous glass base material for optical fiber according to claim 1, wherein a deposition efficiency ~~was~~ is in a range of 0.55 to 0.59.

14. (New) A method of manufacturing glass base material for optical fiber, comprising:

the method of manufacturing porous glass base material according to claim 1; and

dehydrating and sintering said porous glass base material to transform said porous glass base material into clear glass.

15. (New) The method of manufacturing porous glass base material for optical fiber according to claim 6, wherein the target has a diameter of about 50 mm when said depositing begins, and

wherein the porous glass base material has a diameter of about 300 mm when said depositing ends.

16. (New) The method of manufacturing porous glass base material for optical fiber according to claim 6, wherein said burner is one of four burners aligned at about 150 mm intervals.

17. (New) The method of manufacturing porous glass base material for optical fiber according to claim 11, wherein the target has a diameter of about 50 mm when said depositing begins, and

wherein the porous glass base material has a diameter of about 300 mm when said depositing ends.

18. (New) The method of manufacturing porous glass base material for optical fiber according to claim 11, wherein said burner is one of four burners aligned at about 150 mm intervals.

19. (New) The method of manufacturing porous glass base material for optical fiber according to claim 9, wherein said burner comprises a concentric multi tube burner, the method further comprising:

supplying $SiCl_4$ at about 1 Nl/min and O_2 at about 8 Nl/min to a first tube of said concentric multi tube burner early in said depositing;

supplying $SiCl_4$ at about 10 Nl/min and O_2 at about 20 Nl/min to a first tube of said concentric multi tube burner near the end of said depositing;

supplying air to a second tube of said concentric multi tube burner during said depositing;

supplying H_2 at about 50 Nl/min to a third tube of said concentric multi tube burner early in said depositing;

supplying H_2 at about 200 Nl/min to a third tube of said concentric multi tube burner near the end of said depositing;

supplying N_2 at about 4 Nl/min to a fourth tube of said concentric multi tube burner near the end of said depositing;

supplying O_2 at about 20 Nl/min to a fifth tube of said concentric multi tube burner early in said depositing; and

supplying O_2 at about 60 Nl/min to a fifth tube of said concentric multi tube burner near the end of said depositing.

20. (New) The method of manufacturing porous glass base material for optical fiber according to claim 13, wherein said burner comprises a concentric multi tube burner, the method further comprising:

supplying $SiCl_4$ at about 1 Nl/min and O_2 at about 8 Nl/min to a first tube of said concentric multi tube burner early in said depositing;

supplying $SiCl_4$ at about 10 Nl/min and O_2 at about 20 Nl/min to a first tube of said concentric multi tube burner near the end of said depositing;

supplying air to a second tube of said concentric multi tube burner during said depositing;

supplying H_2 at about 50 Nl/min to a third tube of said concentric multi tube burner early in said depositing;

supplying H_2 at about 200 Nl/min to a third tube of said concentric multi tube burner near the end of said depositing;

supplying N_2 at about 4 Nl/min to a fourth tube of said concentric multi tube burner near the end of said depositing;

supplying O_2 at about 20 Nl/min to a fifth tube of said concentric multi tube burner early in said depositing; and

supplying O_2 at about 60 Nl/min to a fifth tube of said concentric multi tube burner near the end of said depositing.